CLAIMS

 A network including a bus through which data is transmitted and a plurality of network devices connected to the bus,

wherein at least one of the plurality of network devices includes measurement means for measuring a certain variate in a predetermined measurement cycle and data output means for outputting a result measured by the measurement means on the bus, and

wherein at least another one of the plurality of network devices includes means for detecting the predetermined cycle from a plurality of timings when the measurement result is output on the bus, measurement means for measuring a certain variate at measurement timings on the basis of the predetermined cycle, and data output means for outputting a result measured by the measurement means on the bus.

2. A network including a bus through which data is transmitted and a plurality of network devices connected to the bus,

wherein at least one of the plurality of network devices includes measurement means for measuring a certain variate at measurement timings on the basis of a predetermined reference timing and data output means for

adding information concerning the measurement timings to a result measured by the measurement means and outputting the result on the bus.

- 3. The network according to Claim 2, wherein at least another one of the network devices includes measurement means for measuring a certain variate at measurement timings that are determined on the basis of the measurement timing information added to the measurement result with respect to a base time when the measurement result is output, and data output means for outputting a result measured by the measurement means on the bus.
- 4. The network according to Claim 2, wherein the predetermined reference timing is a timing generated by at least one of the network devices.
- 5. The network according to Claim 2, wherein the predetermined reference timing is a timing when a certain network device, among the plurality of network devices, outputs a signal on the bus.